From C-H activation to C-C activation: new catalytic processes in organic chemistry

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Abstract:

In the last few years, coupling methodologies based on the activation of a C-H bond or a C-C bond (via decarboxylation) have appeared as attractive alternatives to the traditional cross-couplings between a haloarene and an organometallic compound. The development of these new methods are hindered by a number of challenges, including the low intrinsic reactivity of most C-H and C-CO_2H bonds and regioselectivity problems in the case of C-H activation. Our recent work has been aimed at developing novel catalytic systems that address the problems of reactivity and selectivity.

Igor Larrosa, biographical sketch
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Igor was born in Barcelona, Spain. He received his undergraduate education at the Universitat de Barcelona (1999) where he also underwent M.Sc. and Ph.D. studies with Felix Urpi and Pere Romea. A fellowship from Ministerio de Educacion y Ciencia supported three month's research in Professor Erick M. Carreira's laboratories at ETH Zurich, Switzerland. With a second fellowship he started postdoctoral research in Professor Anthony G. M. Barrett's group at Imperial College London, UK, were he was appointed group leader. In September 2007 he started his independent career as a Lecturer in synthetic organic chemistry at Queen Mary University of London, and was promoted to Senior Lecturer in 2011 and to Reader in Catalysis in 2012